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Study of Information Seeking Pattern of School Teachers in Sri Lanka with respect to Curriculum Planning

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Abstract

The study was conducted to examine information seeking pattern of school teachers in Sri Lanka. The survey method was adapted for this study and a self-administered questionnaire was used as main data collection tool. The school teachers who enrolled to follow postgraduate courses in the Department of Education, University of Peradeniya, Sri Lanka were selected as the study population and the collected data were analyzed using SPSS (21.0). The study found that most of the respondents used face to face discussions and mass media as communication channels and most of the respondents study curriculums, teachers' guides and students' text books before preparing the lesson plans. Most of the teachers seek information with a perceived idea in mind. The teachers consider whether the contents of the documents address the topics on the syllabi adequately when evaluating information sources. This study also identified several problems that encounter by the teachers when seeking information for Curriculum planning.

Keywords:- Information Sources, Information Seeking Pattern, Curriculum Planning, Education, School teachers, Sri Lanka

1. INTRODUCTION

Effective teaching largely depend on teachers' ability to access and use information more deliberately to enhance knowledge that required for teaching ¹. As a result, teachers are needed various types of information to fulfill their professional needs. Information seeking has been understood as a process in which the actor's understanding of his or her tasks or problems, information needs, relevance criteria, and the available information space evolve. The actors studied have been varied, now including various professional groups and also lay people. These studies have provided rich and realistic descriptions on how people encounter discontinuities or gaps and how they try to make sense of them². The lesson planning is a fundamental task of teachers. Teachers plan lessons to transform a curriculum or a syllabus, institutional expectations

and their educational conceptions into practical guidelines for the classroom³. Lesson plans are written guides with varying degree of structure and detail. Lesson planning involves teachers in interpreting and transforming a significant range of information to specify learning exercises, schedules, teaching and learning resources, means to control the class, and learning objectives⁴.

The concept of information seeking pattern refers to the process of identifying, choosing and locating a likely information provider that will satisfy the information needs that the individual has. It is concerned with who needs what kind of information, for what reasons as well as how that information is found by the user, evaluated and eventually used. Several factors are at play in the process. These include inter alia, the information seeker's perception of the information sources or provider and confidence in the sources or provider⁵. Prasad defined the concept of information seeking pattern as strategies and actions undertaken to locate knowledge. He further contend that the concept is concerned with the integrative utilization of three basic resources, which are; people, information and systems⁶. An individual may follow various paths in trying to satisfy an information need which has arisen. This may entail turning to personal sources or formal information systems such as libraries or community information centers. Seeking information for lesson plans may be viewed as teachers' purposive information-seeking, which is also noted by Kahlert, Lundh and Sanchez and Valcarcel.^{7,8,9}

Although the studies on information seeking behaviour of different professional groups are popular in the literature but studies on information seeking among school teachers are lacked. Therefore the present study conducted to examine the sources of information use and information seeking pattern of school teachers in Sri Lanka. The aim of the study was to understand the teachers' information resources usage and the methods and styles adapted by them in satisfying their information requirements in lesson planning.

2. SIGNIFICANCE OF THE STUDY

Within library and information science research, few studies could be found on information seeking pattern of school teachers in lesson planning. But no study can be found on information seeking pattern of school teachers in Sri Lanka. This study certainly will guide for better ways that information can be provided and upgrade information services to meet school teachers' information needs that required for lesson planning.

3. REVIEW OF RELATED LITERATURE

Merchant and Hepworth (2002) investigated the sources of information used by teachers in lesson planning and the study found that the variety of information channels and sources were used by teachers in instructional planning.¹⁰ Small and others (1998) surveyed teachers' use of information sources in instructional planning, which covers both daily lesson planning and long-term unit planning¹¹. Perrault surveyed and interviewed teachers about their use of electronic resources in lesson planning¹². In the same vein, it is established that teachers' information needs are related to teaching methods, subject curriculum and the syllabus including examinations as well as subject knowledge to be taught¹³. It is evident from the literature that teachers are required information mainly on subject matter, pedagogy and students assessment. The most preferred sources of information of the teachers were books, colleagues and personal notes while high work load, focus on extramural activities, and pressures with regard to examination results were identified as barriers that encounter when seeking information for lesson planning.¹⁴

Tanni and others conducted a pilot study to examine teacher trainees' information seeking behavior in lesson planning and specifically they investigated information channels, sources, criteria for selection information, information seeking pattern and information use. The study concluded that the teachers accessed information through a diverse set of channels and utilized various types of sources and applied various information seeking strategies when seeking information for lesson plans.¹⁵ Kolozs conducted a survey to identify the information needs of the secondary school teachers and found that the teachers are needed information on subjects they taught.¹⁶ The study conducted by Dillon found that libraries have played a significant role by providing information that required for the secondary school teachers in the rural New South Wales, Australia. The study suggested the computer networks as a means to overcome the problems of teachers.¹⁷ Similarly Oosthuizen recommended to provide a mobile library service for the teachers who work in primary and secondary schools which are in the Orange Farm area in South Africa.¹⁸

The information seeking behavior of trainee teachers from two teacher training colleges in the State of Johor, Malaysia were investigated by Shanmugan. The study examined the information needs of trainee teachers and their perceptual feelings that arise from these needs, to establish the motives of seeking information, to explore the resources or channels chosen by trainee teachers to satisfy their needs and also to assess the extent of potential problems trainee teachers

encountered in information seeking. The Study revealed that the trainee teachers' information seeking is heavily influenced by their course requirements and they mostly preferred to read the Malay language than English. The study further revealed that time is a major limiting factor in the information seeking.¹⁹

4. OBJECTIVES OF THE STUDY

The main objective of the present study is to examine school teachers' information seeking pattern when acquiring information for lesson plans.

- ❖ To identify the sources of information used by teachers in lesson planning.
- ❖ To find out the criteria for selecting the information for lesson planning.
- ❖ To analyze the information styles employed by the teachers in lesson planning.
- ❖ To list out the preferred information channels to prepare the lesson plans.
- ❖ To identify the problems faced by teachers when seeking information for lesson plans.

5. METHODOLOGY

The study population was all postgraduate student teachers who enrolled to follow postgraduate courses conducted by Department of Education, Faculty of Arts in the University of Peradeniya, Sri Lanka. A questionnaire was the main research instrument that used for data collection and distributed to the all postgraduate students who follow Masters in Education (M.Ed.) and Post Graduate Diploma in Education at the Department of Education.

A structured questionnaire was designed to gather data and it comprised three major sections. Section A of the questionnaire sought information about the respondents' personal and professional data. Section B comprised preferred information sources, communication channels and styles of information seeking when preparing lesson plans and Section C comprised the problems encountered by the teachers when seeking information for lesson planning. Data collection was carried out on September 2018 and the collected data were analyzed by using SPSS software package version 21.

6. DATA ANALYSIS AND FINDINGS

6.1 Demographic Profile

Total population of 440 postgraduate students in the Department of Education was surveyed and 265 responded making 60.2% response rate. Of the respondents, 74% % were female while 26%

were male. Table I provide the demographic and professional information of the respondents of the study

Table 1: DEMOGRAPHIC AND PROFESSIONAL CHARACTERISTICS

S.No	About respondents	Frequency	Percentage
1	Age of respondents		
	26-30 years	07	2.6
	31-35 years	89	33.5
	36-40 years	109	41.1
	More than 40	60	22.8
2	Years of teaching experience		
	1-5 years	67	25.4
	6-10 years	136	51.4
	11-15 years	38	14.5
	16-20 years	20	7.6
	More than 20	04	1.1
3	Highest educational qualification		
	Masters degree	36	13.6
	Bachelor degree	174	65.7
	Post graduate Diploma	55	20.7
4	Periods per week works		
	Less than 5	01	0.4
	5-10	06	2.3
	11-15	01	0.4
	16-20	13	4.9
	21-25	29	10.2
	26-30	69	26.6
	31-35	82	31.2
	36-40	60	22.5
	More than 40	04	1.5

As revealed in table 1, most of the respondents (41%) were in age of 36-40 years range followed by 33% were in 31-35 years range and 22% of them were more than 40 years aged. In terms of

their experience in teaching, 51% had 6-10 years' experience while 25% had 1-5 years and 14% being in 11-15 years in teaching profession. With regard to their educational qualifications, two third of them (65%) had bachelor degree while 20% of them had postgraduate diploma. The results further revealed that the majority (31%) worked 31-35 periods followed by 26% worked 26-30 periods and 22% worked 36-40 periods per week.

6.2 Sources of Information and Communication Channels for Lesson Plans

Information sources are physical entities in a variety of media providing data or signs, which may become information when perceived.²⁰ it is evident from the literature that teachers used wide array of information sources to acquire information that needed for lesson plans. Therefore the current study asked from the respondents to indicate the sources of information and communication channels used for preparing lesson plans.

Table 2: Information Sources and Communication Channels

Sources	Yes	%	No	%	Channels	Yes	%	No	%
Teachers Guides	241	90.9	24	9.1	Face-to-face discussions	133	50.2	00	00
School library	145	54.7	120	45.3	Media (Radio, TV, etc.)	128	48.3	01	0.3
Books	139	52.4	126	47.5	Internet	74	27.9	15	5.7
Personal knowledge/experience	133	50.2	132	49.8	Telephone	53	20.0	09	3.4
Internet	109	41.1	156	58.9	E –mail	39	14.7	51	19.2
Colleagues in school	105	39.6	160	60.4	SMS	33	12.5	34	12.8
Government ministries documents	28	10.6	237	89.4	Letters	20	7.5	35	13.2
Note= 265									

As explicit in Table 2, more than 90% of teachers used teacher's guides followed by 54.7% used school library and 52.4% used books as source of information. More than 89% mentioned that they did not use publications of government ministries and 60.4% mentioned they did not use

colleagues in the school as source of information. It was further revealed that 50.2% of the teachers used face-to-face discussions and 48.3% used mass media as communication channels. Of the respondents, 27.9 % used the internet and 20% used telephone as for communication channels to obtain information that needed for lesson planning.

6.3 Styles of Information Seeking for Lesson Planning

The study investigated teachers' information seeking pattern that followed when preparing lesson plans and the result obtained from the questionnaire is presented in Table 3.

Table 3: Styles of Information Seeking for Lesson Planning

S.No	Step follow/style	Yes	%	No	%
1	Study curriculum	192	72.4	73	27.5
2	Study teachers guides	187	70.6	78	29.4
3	Study students text books	150	56.6	115	43.4
4	Read books by focusing the topic that need for lesson	104	39.2	161	60.8
5	Use personal knowledge and experience	100	37.7	165	62.3
6	Referencing relevant materials and re-reading	92	34.7	173	65.3
7	Compare with available information	92	34.7	179	67.5
8	Use personal collection	91	34.3	174	65.7
9	Study past papers	86	32.4	179	67.5
10	Search internet to find information	72	27.2	193	72.8
11	Discuss with teachers in school who taught relevant subject	66	24.9	199	75.1
12	Discuss teachers in other school who taught relevant subject	47	17.7	218	82.3
13	Meet librarian and discuss	36	13.6	229	86.4
14	Read various subjects relevant to the topic	30	11.3	235	88.7
Note: N=265					

As revealed in the Table 3, 72% of teachers study curriculum followed by 70.6% study teachers guides while 56.6% study pupils' text books when preparing the lesson plans. It is noteworthy

that more than 60% of the respondents mentioned that they did not refer any other sources of information other than these three sources when preparing lesson plans.

6.4 Information Seeking Experience of Teachers

The study examined the experience with regard the availability of information needed for lesson plans in the schools and the result obtained from the questionnaire is presented in Table4.

Table 4: Information Seeking Experience of Teachers

S.No	Experience	Frequency	Percentage
1	Too much information(More than enough)	67	25.3
2	Average information (enough)	164	61.9
3	Shortage of information (Not enough)	27	10.2
4	Not responded	07	2.6
	Total	265	100

As revealed in Table 4, the majority (62%) of the respondents indicated that they have enough information while 25% mentioned that they have too much information available in schools. It is noteworthy that only 10% mentioned that the information available on schools is not enough for lesson planning. These results give an insight that school teachers have enough information in schools that required for preparing lesson plans.

6.5 Information Seeking Process

The study examined the process followed by the teachers when seeking information for lesson plans and the results obtained are presented in Table 5.

Table 5: Information Seeking Process Employed in Lesson Planning

S.No	Scope of effort	Always		Sometimes		Never		Not responded	
		N	%	N	%	N	%	N	%
1	Referring sources of information according perceived idea in mind	185	69.8	53	20	02	0.7	25	9.4
2	Needed information are searched from mass media	97	36.6	116	43.8	16	6.0	36	13.6

3	Seek information through collaborative efforts	87	32.8	150	56.6	00	00	28	10.6
4	Searching information through proxies	12	4.5	122	46.0	82	31.	49	18.5

Note: N=265

It is revealed in the Table 5, nearly 70% of the respondents always refer sources of information according the perceived idea in mind while 36% mostly use mass media such as television, radio and newspapers etc.to obtain required information for lesson plans. Of the respondents, 33% often seek information with collaboratively with others while only 4.5% mentioned that they asked others to seek information on their behalf.

6.6 Preferred Information Formats and Factors Used to Evaluate Information Sources

In order to address one of the research questions of this study, the respondents were asked to mention the preferred format of information that they used for preparing the lesson plans. They were asked to select one option from three options (Printed format only, Electronic format only and both format) given in the questionnaire. They were further asked to mark the criteria that they used to evaluate the information sources that used for lesson planning

Table 6: Preferred Formats and Evaluation Factors

Format	No	%	Evaluation factors	No	%
Printed format only	76	28.7	Information addressing the topic in the syllabus	168	63.4
Electronic format only	07	2.6	Information with simple language for learners	154	58.1
Both format	168	63.4	Information with learners activities	137	51.7
Not responded	14	5.2	Information with colorful illustrations	133	50.2
Total	265	100	Date of publication	53	20.0

As revealed in Table 7, 65.7% of the respondents often use personal collection at home for lesson planning followed by 58.9% often use the school library and 34.7% sometimes use school library. Of the respondents 20% either always or 41.5% sometimes use internet café followed by 14.7% either always or 43.8% sometimes use public library to obtain information that needed for lesson planning while 12.8% either always or 42.6% sometimes use school IT center for the purpose.

6.8 Problems Encountered in the School Library When Seeking Information for Lesson Planning

As indicated in the Table 7, most of the respondent use school library for accessing information that required for lesson plans other than their personal collection at home. Therefore the respondents were asked to indicate their opinion on various problems might have to encounter in the school library when seeking information for lesson planning and Table 8 presents the descriptive statistics of the respondents' opinion about it.

Table 8: Descriptive Statistics of Teachers' Opinion on Problems in School Library

S.No	Problem	SA	Agree	Neutral	NA	SNA	NR	M	SD
1	Lack of subject related materials	62	118	10	40	07	28	1.99	1.016
2	No school library	20	33	09	88	64	51	2.21	1.099
3	No permanent administrator for the library	53	57	16	62	28	49	2.29	1.107
4	Not available non print materials	56	90	30	32	16	41	2.38	1.207
5	Shortage of information in the library	51	121	12	40	09	32	2.50	1.326
6	Out dated reading materials	86	110	12	31	03	23	2.77	1.146
7	No permanent building for library	40	39	09	77	68	32	2.79	1.420
8	No qualified school librarian	68	63	28	52	17	37	3.40	1.483

9	Non relevant reading materials	26	98	16	84	07	34	3.67	1.303
Note: N=265									
1=Strongly Agree(SA) , 2=Agree , 3=Neutral 4=Not Agree(NA), 5= Strongly Not Agree (SNA) , NR= Not Responded , M=Mean , SD= Standard Deviation									

As shown in Table 8, teachers showed higher level of agreement for three statements of “Lack of subject related materials in the school library is a problem” (mean=1.99) and “There is no school library to use when preparing lesson plans” (mean=2.21) and “There is no permanent administrator for school library is a problem” (mean=2.29). Other than that the respondents are either neutral or disagree with rest of the statements given as the problems of the school library.

6.9 Problems Faced When Seeking Information for Lesson Plans

One of the objectives of this study was to examine the problems faced by the teachers when seeking information for lesson plans. In order to examine the problems that encounter by the respondents, they were asked to mention whether they have experienced of the given problems in the questionnaire. The study identified eight problems that most of them have encountered and the respondents were further asked to select their response in terms of main problem, not a problem and never and the results are presented in the table 9.

Table 9: Problems Faced When Seeking Information for Lesson Planning

S.No	Hindrance	MP	%	NP	%	Never	%	NR	%
1	There was a lack of information sources	125	47.2	92	34.7	11	4.1	37	14.0
2	Information available was not adequately addressing syllabus	123	46.4	96	36.2	08	3.0	38	14.3
3	Heavy teaching load and too many learners in class room	119	44.9	93	35.1	11	4.1	42	15.8
4	Lack of time to search for Information	116	43.8	92	12.6	15	5.7	42	15.8
5	Inadequate library facilities in school	112	42.7	84	31.7	08	3.0	61	23.0

	library								
6	Information was outdated	113	42.6	75	28.3	18	6.8	59	22.3
7	Finding the relevant information was difficult	103	38.9	102	38.5	09	3.4	51	19.2
8	Interpreting and using of information for lesson plans was difficult	92	34.7	101	38.1	15	5.7	38	14.3
Note: N=265									
MP= Main Problem , NP= Not a Problem , NR= Not Responded									

The top ranked identified problem to information seeking was lack of information sources available (47.2%) and the second hindrance identified was the information available was not adequately addressing the syllabus (46.4%) as the main problems by the teachers when seeking information for lesson planning. The heavy teaching load and too many learners in the classroom (44.9%) and the lack of time to search information (43.8%) are also identified as the third and fourth problem they encountered when seeking information when preparing lesson plans. Having problem with heavy workload of the teachers was proved with the results in table 1 that indicated 81.8% of the teachers worked more than 26 periods per week in the school.

7. CONCLUSION

The present study examines the information seeking pattern employed by school teachers when seeking information for lesson plans. The findings from this study provide some insight for better ways that information can be provided to fulfill the teachers' information needs that required for lesson planning. The school teachers' information needs are diverse and they use a various types of information sources as well as communication channels in order to fulfill their information needs that required for lesson plans. They used teachers' guides, resources in school library, books and personal knowledge for lesson plans than other sources of information. Their frequent used communication channels are face to face discussions and mass media (Television, Radio, Newspapers etc). Most of them study curriculum, teachers' guides and students' text books before preparing the lesson plans. Most of the teachers experienced that having enough

information for preparing the lesson plans and most often they seek information with a perceived idea in mind when seeking information for lesson plans.

Teachers' general pattern of information seeking showed that they mostly preferred both print and electronic formats and most of them often use personal collections at home and access to school libraries to find information that is needed for teaching. It is evident that the teachers consider whether the contents of the documents address the topics on the syllabi adequately when evaluating information sources. The main problems faced by teachers in schools' libraries were lack of subject related materials in the school library, lack of information sources and available information sources was not adequately address the syllabus. Heavy teaching load and crowded class room were also identified as main problem faced by teachers when seeking information for lesson plans in general.

8. IMPLICATIONS

Since the findings of the study established that teachers heavily use school libraries for finding information to prepare the lesson plans and therefore school library administrators should maintain a comprehensive, current and up to date collection that is relevant to the syllabuses for all disciplines that taught in school level. School administrators should ensure that the library facilities are available in extra hours i.e. lunch periods and after school since most of the teachers are busy with heavy work load during the school hours. Since school libraries are lacked of necessary sources of information that relevant for lesson planning, it should be recommended for formation of school library consortia which enable for resource sharing and divide inequity of resource distribution among schools.

Even though the findings indicated that the teachers preferred both print and electronic formats they heavily depend on traditional print sources such as books, teachers' manuals and pupils' text books etc. Therefore it should be necessary for conducting information skills programs for school teachers to educate them on how to use electronic resources, particularly the internet as source of information in order to narrow the digital divide.

Attention must be given to acquire more current print information sources for the school libraries to fulfill information needs of the teachers for the lesson planning. At the same time workshops and seminars should be conducted on information seeking practices among school teachers while educating them on accessing information that is relevant for their lesson plans through various

information sources. There is an argument that teachers should be information literate if we expect that the students to be²⁴. Therefore information literacy training programs should be conducted to educate the teachers on various information tools and strategies that would be enable them to find relevant information effectively. These programs should emphasis on developing information literacy skills among teachers while introducing mobile technology which is potential tool that can be used to eliminate digital illiteracies.

9. Suggestion for Further Research

This study focus on use of information sources and information seeking pattern of school teachers but the study population is limited for the students who follow postgraduate courses in the Department of Education at the University of Peradeniya, Sri Lanka. It would be better if the same study could be done for a larger population.

10. References

1. Anderson L.W. & Krathwohl D.R, *A taxonomy for learning, teaching, and assessing: a revision of Bloom's taxonomy of educational objectives*. (Allyn & Bacon; Boston), 2000, p.21-26.
2. Carr J A, *Information literacy and teacher education: ERIC Clearinghouse on Teaching and*
3. Dias Gasque K CG and de Souza Costa S M, The elementary and secondary school teachers' information-seeking behaviour on behalf of their own continuing education. *Ciência da Informação*, 32(3) (2003) 54-61.
4. Dillon K, Serving the professional information needs of rural secondary school teachers in New South Wales, *School Library Needs Quarterly*, 23 (3) (1997) 171-176.
5. Jarvelin K and Ingwersen P, *Information seeking research needs extension towards tasks and technology, Information Research* (2004). Available at <http://InformationR.net/ir/10-1/paper212.html> (Accessed on 02 June 2019).
6. Jarvelin K. and Ingwersen P, *Information seeking research needs extension towards tasks and technology*. Available at: <http://InformationR.net/ir/10-1/paper212.html> (Accessed on 15 March 2019).
7. John P D, Lesson planning and the student teacher: re-thinking the dominant model. *Journal of Curriculum Studies*, 38(4) (2006) 483-498.
8. Julien H and Michels D, Source selection among information seekers: Ideals and realities, *Canadian Journal of Library and Information Science*, 25(1) (2000) 1-18.

June 2019).

9. Kahlert J, Service industry for teachers: Using the Internet to plan lessons. *European Journal of Education*, 36(2) (2001) 189-193.
10. Kolozs, B, Information needs of teachers in vocational secondary schools, *Könyvtári Figyelő*, 38 (1) (1992) 73-80.
11. Lundh M, *Information seeking and teachers: A study of high school teachers in the transition from education to occupational practice*. Available at: <http://hdl.handle.net/2320/1316> (Accessed on 12 May 2019).
12. Maepa E, *Information needs and information seeking pattern of rural people in the Northern Province, Maisila*, Available at: <http://ujdigispal.ac.za/bitscan/handle/10210> (Accessed on 12 April 2019).
13. Merchant L and Hepworth M, Information literacy of teachers and pupils in secondary schools. *Journal of Librarianship and Information Science*, 34(2)(2002) 81-89.
14. Merchant L and Hepworth M, Information literacy of teachers and pupils in secondary schools, *Journal of Librarianship and Information Science*, 34(2)(2002) 81-89.
15. Oosthuizen BL, Decentralized information user education, *Journal of Library and Information Science*, 66 (2) (1998) 67-77.
16. Pattuelli M C, Teachers perspectives and contextual dimensions to guide the design of N.C. history learning objects and ontology, *Information Processing and Management*, 44(2) (2008) 635-646.
17. Perrault A M, *An Exploratory Study of Biology Teachers' Online Information Seeking Practices*, *School Library Media Research* (2007). Available at: www.ala.org/aasl/slr (Accessed on 09 May 2019).
18. Prasad H, *Information needs and users*, (Indian Bibliographic Centre; Varanasi), 1992, p.12-19.
19. Sánchez, G and Valcárcel M V, Science teachers' views and practices in planning for teaching. *Journal of Research in Science Teaching*, 36(4)(1999) 493-513.
20. Shanmugam A, Information seeking behaviour of trainee teachers in selected teacher training colleges in Malaysia, *Malaysian Journal of Library & Information Science*, 4(1)(1999) 1-26.
21. Small R V, Sutton S, Eisenberg M, Miwa M and Urfels C, *An investigation of PreK-12 educators' information needs and search behaviors on the Internet*, In Proceedings of the paper presented at the National Convention of the Association for Educational Communications and Technology, Association for Educational Communications and Technology, Washington 18-22 February 1998, p. 401-414.

22. Snyman M and Heyns D, The information needs of Afrikaans T1 teachers,*Mousaion*, 22(2)(2004) 211-229.
23. Tanni M, Sormunen E and Syvänen A,*Prospective history teachers' information behaviour in lesson planning*. Available at: <http://InformationR.net/ir/13-4/paper374.html> (Accessed on 10 March 2019).
24. Tanni M, Sormunen E and Syvänen A,*Prospective history teachers' information behaviour in lesson planning*, *Information Research* (2008). Available at <http://InformationR.net/ir/13-4/paper374.html> (Accessed on 22 May 2019).